HD audio MICROMEGA

OPERATING MANUAL

AS-400

Dear Customer,
Thank you for purchasing Micromega AS400 Integrated amplifier.
This unit provides ease of use and sonics of the highest quality. Please pay close attention to this instruction manual, and read it fully before attempting to operate. It is designed to ensure you maximise your pleasure and familiarise you with its many unique functions.

CHECKING

Check that the carton has no damage. Should you have any doubt about its condition, please do not hesitate to contact your dealer.

UNPACKING

Very carefully remove the unit from the box, taking care to preserve all the packing material. It is good practice to put the carton and its contents into an outer plastic bag and deposit it somewhere safe and dry. In the unlikely event that your unit needs to be sent back to either your dealer or distributor, it must be sent in the original packing material. Failure to observe this will invalidate your warranty.

ACCESSORIES

Upon opening the carton you should find the following:
- Mains Lead
- Remote control handset
- 4 pces AAA battery.

MAINS VOLTAGE

- Check that the mains voltage indicated on both the carton and the rear of the unit correspond to the local power supply
- If you are in any doubt, consult your dealer.

INSTALLATION

In order to obtain the maximum performance of your AS-400, it is important to follow the installation instructions.
Wherever possible, we recommend that your amplifier is installed in an audio rack or other suitable furniture that provides sufficient ventilation.

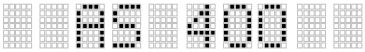
WARNING!
If for aesthetic or ease of use reasons, you choose to stack the units, it is imperative that you place your amplifier on the top. Never place any unit on top of your amplifier. We recommend that you provide a space of at least 30cm above your amplifier in order to ensure adequate ventilation.

CONNECTIONS

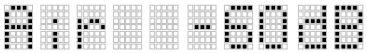
Having verified that the mains voltage indicated on the rear of the unit corresponds to the local power supply mains voltage and that the ON/OFF switch is on OFF position, connect the mains leads provided to the rear the unit and to the wall socket.
Connect the Stereo Interconnect cables from the rear of all your sources to the corresponding inputs on your amplifier.
Connect your loudspeaker cables between your amplifier and your loudspeakers paying attention to polarity.
The very high quality speaker terminals accept different type of connections like bananas, or stripped up to 10mm² speaker wires. It is important to use quality speaker cable to get the maximum out of your amplifier.

POWERING UP

You may now turn on your amplifier by switching the ON/OFF switch located at the back of the unit.
The display indicates the model of your amplifier:



Then the standby LED lights up indicating that the unit is on standby mode.
Press on the STANDBY key of the unit of the unit or on the AMP key of the remote control handset if you have one. The unit turns on and the display shows:



The *AirDream* logo located below the dot matrix display lights up in blue for a very short period then in red. After about 1 minute, the *AirDream* logo resumes to blue indicating that the *AirDream* section is ready. Please read the attached manual for its configuration.
NOTA: Due to the very large amount of energy stored in the power supplies, it is strongly recommended to wait for 15 seconds between turning off the unit and turning it on again. If you do not follow this recommendation a very small switching noise could appear in the speakers.

FRONT OF THE AMPLIFIER

iPOD: Analog input used for external sources

HEADPHONE: Headphone socket

ROTARY CONTROL: To control volume and setup.

< INPUT SELECT >: Input selection.

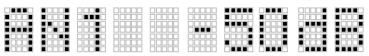
MONITOR: Direct access to *TAPE* or *PRO ON* mode.

MUTE: To mute the amplifier and to set the Balance.

HEADPHONE: To switch on the Headphone output and switch off the speakers. A headphone logo appears on the left side of the volume indication.

STANDBY: To switch the unit in and out of standby. A blue LED located below the central knob indicates the unit is in standby.

DISPLAY



The display indicates:
- On the left side the selected source.
- On the right side the volume level.
- In some cases the status of the unit (Balance, Headphone…).

SELECTION (< INPUT SELECT >)

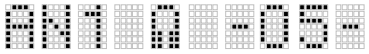
The selection of inputs is made via the < *INPUT SELECT* > keys.
- In order to select your choice of input use successive depressions of the key.
The display will indicate the name of the selected source from the following list: *PHO – AN1 – AN2 – AN3 – iPod.* To comply with the latest European legislation, the AirDream module is active only when its input " Air " is selected

VOLUME

The setup of volume is achieved with the rotary control located in the centre of the front panel. The increment of the rotary volume control is dependent from the speed of rotation of the encoder. The display will indicate a level between -80dB and 0 dB..

LISTENING TO HEADPHONES (HEADPHONE)

The headphone socket is located on the front panel of the unit. The headphone volume setting is independent of the loudspeaker volume.
- Press the HEADPHONE key.
The display will indicate:



Note: When headphones are in use, the loudspeaker output is automatically disconnected.

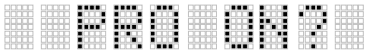
- Headphone volume can be adjusted via the central rotary control.
-Press the HEADPHONE key to return to loudspeaker operation.
The headphone logo disappears and the unit returns to its previous setup including volume level.

MONITOR

This function allows full record monitoring when combined with a three head recording device. It also allows insertion of another unti in the listening loop (equalizer...)
- Press the MON/PRO key.
- The amplifier is now in monitor mode and the source is *TAPE*
- Press once again the MON/PRO key to return to normal operation.

PRO ON (MONITOR**)**

The *PRO ON* mode allows to use the power amplifier section of your amplifier in combination with an external multi-channel Audio processor like AP-180. A specific input (PRO IN) is dedicated to this mode. A long pressure (2 seconds) on the MON/PRO key and the display will indicate:

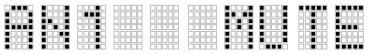


It is necessary to confirm your choice by a second depression on the MON/PRO key. .The question mark disappears.
Press once again the MON/PRO key to return to normal operation.

If you go to standby mode (Pressure on the STANDBY key) or if a power failure happens while your unit was set in PRO ON mode, the unit will revert automatically into PRO ON mode when going out of standby or when power comes back again.

MUTING (MUTE)

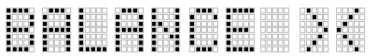
- Press this key when you want to put the amplifier into *MUTE* mode. The display will indicate:



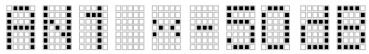
- Press again MUTE to resume listening

BALANCE (MUTE)

- Press the MUTE key for a period of 2 seconds.
The display will indicate:



- Set the desired balance using the central rotary control.
- If you turn clockwise, the display will show R1, R2…R6 indicating that the right speaker level will be increased by 1, 2…6 dB.
- If you turn counter clockwise, the display will show L1, L2…L6 indicating that the left speaker level will be increased by 1, 2…6 dB.
- Press again on the MUTE key to exit balance setup.
If you had offset the balance, the display will indicate it by inserting a balance logo :



PRE-OUT OUTPUTS

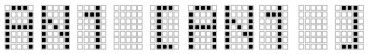
Your amplifier is fitted with PRE-OUT outputs to allow you to use an external power amplifier.

2.1 MODE

Your amplifier is equipped with a SUB-OUT output. You can connect an active subwoofer to this output. The level of this output is set by the main volume control of the unit.
If you have an audio-video processor like AP-180, a SUB-IN input is available just above the SUB-OUT connector.
Connect the SUB-OUT of your audio-video processor to the SUB-IN of your amplifier. When in Stereo mode your amplifier will control the level of your active subwoofer while when in PRO-ON mode the audio-video processor will take control over your active subwoofer.
This unique feature allows a complete different subwoofer set-up between stereo mode and home cinema mode.

ANALOG INPUTS NAMES

The three analog inputs AN1, AN2, and AN3 can be renamed using the internal name library of the microcontroller of your amplifier.
The following names are available: OFF, CD, FM, DVD, TV, SAT, VCR, AUX, AV1, AV2, MP3, SPE, PVR and GAME.
To replace the name of a source, place your amplifier on this source and make a long pressure on the second key INPUT SELECT >. The display shows then:



Using the central rotary knob the name between the brackets will scroll through the list of available names until you find the one you are looking for.
If you wish to change another input name press again on the INPUT SELECT > key and proceed in the same way. Once your choice is done wait 5 seconds and your amplifier will revert to normal operation. During the change of name, listening continues normally without any interruption.

REMOVING AN INPUT [OFF]

While you are setting the names on the four analog inputs, the name [OFF] appears in the list of available names. If you choose to name one or more inputs with this name, the selected inputs will be removed from the listening loop.
Example: You have three sources, a vinyl turntable connected to PHONO input, a CD player that you have connected to AN2 named CD and a FM tuner connected to AN3 named FM.
If you scroll through the inputs, your amplifier will indicate: PHO, AN1, CD, FM, iPod.
If you wish that AN1 do not appear when selecting the different inputs, you should assign it with the name [OFF]. Your amplifier will then indicate: PHO, CD, FM, iPod.

SPECIAL NAMES (CD, FM)

In the list of available names, two names CD and FM are different than the other ones.
If an analog input has been named CD, a short pressure on the CD key of the Micromega system remote control handset will set your Micromega CD player out of standby if it was, set also your amplifier out of standby if it was and set your amplifier automatically on the CD input.
It is exactly the same with any input named FM and the FM key of the Micromega system remote control handset.

IDOK INPUT

Your amplifier is equipped with a DB9 female connector located at the left end side of the rear panel. This connector is used to attach it a Micromega iDok.
This optional unit allows you to charge your iPod or your iPhone and to control them using the Micromega system remote control handset.
On another end, as soon as your amplifier will have detected the presence of an iPod or an iPhone, it will automatically select the iDok analog input and the front panel iPod input will be disconnected.

CONTROL VIA RS-232INTERFACE

Your amplifier is equipped with a DB9 female connector to control it via RS232 interface.
It accepts the following format:

Baud Rate	: 19200 Bauds
Data bits	: 8
Parity bit	: None
Stop bits	: 1
Flow control	: None

You will find complete instructions concerning this interface in the separate RS232 manual.

TECHNICAL CHARACTERISTICS (SW≥1.31) AS-400

AUDIO CHARACTERISTICS

MM Phono Input	1
Phono Input sensitivity / impedance	18mV/47kΩ
Stereo Analog Inputs	3
Analog inputs sensitivity / impedance	280mV/100kΩ
Headphone output (Front)	1
Monitor Loop	1
Sub input pass-through	1
Sub out	1
Sut output cut-off frequency (-3dB)	400Hz
Processor input	1
Pre Out	1
Output Power (both channels / 4Ω)	400W
Frequency response (all loads +0/-3dB)	10Hz – 50kHz
Power bandwidth	20Hz - 35kHz
Output impedance	< 150mΩ / f <.20kHz
Output noise (unweighted 20Hz-20kHz)	< 30µV
THD (20Hz-20kHz – 1/2 power)	< 0.01 %
Signal to noise ratio (A weighted)	> 96 dB

AIRDREAM CHARACTERISTICS

Sample rate (inherent to iTunes software)	16Bits / 44.1 kHz
Frequency range (± 0.5dB)	0Hz – 20kHz
Linearity at -90 dB	0.1dB
Signal to Noise ratio + THD	<-100dB to 1kHz
Dynamic Range	>110dB to 1kHz

WiFi CHARACTERISTICS

Audio file formats	AAC, AIFF, Apple Lossless, MP3, WMA, WAV
Frequency ranges	2,4 or 5 GHz
Standards IEEE	802.11n

OTHER CHARACTERISTICS

IR remote control	Yes
IR remote protocol / frequency	RC5 / 36kHz
RS232 remote	Yes

POWER SUPPLY

Mains voltage	100V-120V-220V-240V
Mains frequency	50Hz-60Hz
Power consumption (max)	900 W

DIMENSIONS (mm)

Width	430
Height (including feet)	95
Depth (including knobs and antenna)	370

WEIGHT (Kg)

Total	15Kgs

his warranty will start from the date of purchase of the Micromega product.
Statutory warranty regulations apply in the country where the Micromega product was purchased. In case of complaints please contact the dealer who supplied your Micromega product.

WARNING: Warranty will be nulled if the unit is not shipped back in its original packing or if the serial number has been modified or erased.

Warranty Certificate

Dealer's Stamp

Date of Purchase

Serial Number

AUDIS sarl. 13-15, rue du 8 mai 1945, ZA de la Haie Griselle, 94470 Boissy Saint Léger FRANCE
TEL: +33 (0)1 4382 8860 - **FAX:** +33 (0)1 4382 6129 - **INTERNET:** http://www.micromega-hifi.com

AS-400 AirDream Connection

QUICK AS-400 AIRDREAM NETWORK CONNECTION

The AS-400 is already configured to ensure easy installation. The procedure is slightly different whether you have a MAC or a PC.
In any case, your computer must be Wi-Fi compatible.

For Macintosh users:
- Your computer will detect the MUSIC network as soon as it is available. Connect your computer to this network by using the default user password **“airdream”.**

For PC users:
When the AS-400 is ready, use your computer to detect the wireless networks available. By default, the name of the Wi-Fi network is MUSIC and the default password is **“airdream”**. If this network figures in the list, select it and connect your computer.

If for any reason the MUSIC network does not show up in the list, check that your computer Wi-Fi connection is active. Refresh the list of available networks and check the status of the ***AirDream*** logo of your AS-400: it should be blue.

LISTENING TO AUDIO FILES OR RADIO STATIONS

Your streamer is now ready to function and is connected to the network. To stream your music files you need to use iTunes or Airfoil.
If you have not already installed iTunes, download the software from the Apple website (www.apple.com/en/itunes). Here is the Airfoil website: (www.rogueamoeba.com)
Airfoil allow you to do whatever iTunes won’t let you do. You can choose any media player (Windows Media, VLC, J.River, Google Chrome, Winamp…) and you can stream music coming from site such as Deezer or Spotify directly to the AS-400
Reading Airfoil manual is very useful to get the most out of it.

Now, launch the iTunes application. Once you have opened it, select the loudspeakers on which you wish to listen to your music. Usually, the AIRPLAY logo appears at the bottom right end side of the iTunes window. Clicking on the AIRPLAY logo and the list of available devices will appear. Select AS400_xxxxxx, (where x represents the serial number of your airport terminal).

And that’s all there is to it. You are now ready to listen to music. Select the audio file you wish to play, then just sit back and listen!

If you are already connected to internet via your home network (see following paragraph), you can also add radio streams to your play-list. Click on Advanced > Open stream and add the address to the URL field.

iPhone, iPod touch and iPad REMOTE

If you have an iPhone, iPod touch or an iPad, they can all be used as a remote control for your iTunes library.

First, you must download the Remote free application from the App Store.

On your iPhone, iPod touch or iPad, in the Settings menu, set up the WiFi connection using the MUSIC network with the password “**airdream** “. Then select “Add Library“ and follow the instructions on the screen. Once synchronized, your iPhone, iPod touch or iPad displays the contents of iTunes library.

AIRPLAY

You can also send music directly from your iPhone, iPod touch or iPad. You device must be compatible with IOS 4.3 and should have been updated with this operating system.

Once completed, put your iPhone, iPod touch or an iPad on the MUSIC network using “airstream” as password and open the iPod function. The AIRPLAY logo appears and by selecting then your AS-400 device, you can play music directly.

RECONNECTION AFTER CHANGING INPUT

In order to comply with the latest European legislation, the AirDream module of your AS-400 has to be turned off whenever the “ Air “ input is not selected. When returning to the “ Air “ input after another input selection, the AirDream module will be reinitialized and you will need to wait one minute until the AirDream logo located under the display will be lighted in blue. You will have then to select again the MUSIC network as mentioned in paragraph 1. If you are connected to a home network as explained in the next paragraph, the reconnection to your network will be automatic.

CONNECTION TO YOUR HOME WiFi NETWORK

If you have a wireless home internet access via a WiFi router, you can connect your AS-400 to that network.

This allows you to listen to internet radio stations on your hi-fi system and continue to surf on the internet at the same time.

To do this, follow the reset procedure detailed below, followed by the specific configuration procedure for your network. To find out more about configuration, please check the specific instruction sheet available on the Micromega website: **www.micromega-hifi.com**.

RESETTING THE UNIT

If you wish to rename your network or connect to an existing network, or if you are having any problems, you **MUST** reset your AS-400. This is not a simple procedure and we advise you to do this only when it is absolutely necessary.

Before starting, check the serial number: AS400_XXXXXX and write it down. This is even more important if you have several wireless peripherals.

With the device switched on, using the tip of a pen or a paper clip, press the Reset button for a few seconds (it is situated on the rear panel) until the ***AirDream*** logo flashing rapidly in Red. This indicates that the reset is complete. Wait al least 60 seconds until the ***AirDream*** logo flashes slowly in red. You can now reconfigure the device. To do so, refer to the specific instruction sheet available on the Micromega website: **www.micromega-hifi.com**.

FREQUENTLY ASKED QUESTIONS

My computer doesn’t detect AS-400. What should I do?

Ensure that the ***AirDream*** logo on Front Panel of the AS-400 is blue and is not flashing. If this is not the case, switch the device off then switch it back on again. Wait until the setup procedure is complete (this may take a few minutes).

Make sure that the Wi-Fi connection of your computer is active and that no other peripheral device is connected to your AS-400. Open the list of available networks and the MUSIC network should appear.

An error message is displayed when I play a track on iTunes.

Check that your firewall allows connections between your computer and the AS-400 (for example if the Windows firewall is activated, ensure that the box entitled “Don’t authorize exceptions” is not checked). Pay special attention to the settings of your antivirus software too.

Ensure that you have installed the latest version of the iTunes software.

In some cases an update of the AS-400 Wifi firmware may also be necessary.

My internet connection is suddenly interrupted for no apparent reason.

Check that no other network is interfering with the connection. Do not place the device close to any potential source of interference and set the MUSIC network as your preferred network.

Most of the time, interruptions are not caused by the AS-400 but depends on the location of your as-400 and your computer are installed. For instance, in a building with metallic structure, the WiFi connection can be troubled.

The AirDream logo on the front of the AS-400 is flashing slowly in red.

The setup procedure has failed. You must complete the setup procedure. To find out how to do so, consult the specific instruction sheet available on the Micromega website: **www.micromega-hifi.com**.